

CLAIMS

What is claimed is:

1. A method for processing a return product, for use with a system for processing a return product, which allows a manufacturer to inquire return product data through a browser of a terminal device and a network communication system, and is pre-constructed with a material database for storing a BOM (bill of material) file of each product category, wherein the BOM file includes a product category code and assembly data, and the product category code is used as an identification number of the BOM file; the method comprising the steps of:
 - (1) constructing a RMA (return material authorization) file for a return product via a return product processing station after receiving the return product from a client, wherein the RMA file includes a product category code, assembly data and a client code of the return product;
 - (2) comparing the RMA file with a BOM file corresponding to the product category code of the return product via the system for processing a return product, so as to determine if the RMA file is identical in assembly data to the BOM file, wherein if the RMA file lacks any assembly data listed in the BOM file, it indicates the return product has lacking assemblies, and then step (3) is followed; or else, step (4) is followed;
 - (3) constructing a return product lacking assembly file via the system for processing a return product according to the lacking assembly data, and establishing a report corresponding to the return product lacking assembly file, for being used to charge the client for the lacking assemblies of the return product;
 - (4) performing a functional test via the return product processing station for the return product, if the RMA file contains all assembly data listed in the BOM

file and the return product is intact in assembly, so as to determine if the return product functions properly, wherein if the return product functions properly, then step (5) is followed; or else, step (6) is followed;

5 (5) constructing a product stock file via the system for processing a return product according to the return product intact in assembly and properly functioning, and packing the return product for exportation via a production line after reading the product stock file;

10 (6) repairing the return product not functioning properly via the return product processing station, and determining if the repaired return product operates properly, wherein if the repaired return product operates properly, then the step (5) is returned; or else, step (7) is followed;

15 (7) determining via the return product processing station if the repaired but not properly operating return product is to be disassembled for obtaining useful assemblies therein, wherein if the return product is to be disassembled, then step (8) is followed; or else, step (9) is followed;

(8) constructing a material stock file via the system for processing a return product according to the disassembled useful assemblies of the return product, and re-assembling the useful assemblies to semi-fabricated products in production via the production line after reading the material stock file; and

20 (9) constructing a testing product lacking assembly file via the system for processing a return product according to unusable assemblies of the repaired but not properly operating return product, and replacing the unusable assemblies of the return product with useful assemblies for making the return product be an exporting product via the production line after reading the testing product lacking assembly file.

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2. The method of claim 1, wherein in the step (3), the return product lacking assembly file includes a return product identification number (ID), a client code, a product category code and lacking assembly data of the return product, and is stored in a lacking assembly database, so as to allow an accounting department to read the return product lacking assembly file and obtain associated data for charging the client for the lacking assemblies.
3. The method of claim 2, wherein the system for processing a return product further includes a printing module for storing the report formed for the return product lacking assembly file in the lacking assembly database, so as to print out the report to be sent to the client by the manufacturer via fax or post, or to send the return product lacking assembly file in the form of the report via a network communication system through e-mail to a terminal device of the client.
4. The method of claim 1, wherein in the step (5), the product stock file includes a return product ID, a client code, a product category code and assembly data of the return product, and is stored in a stock database; if the production line executes production for a product category listed in a production plan, it reads a product stock file from the stock database corresponding to a product category code of the product category, and packs the return product for exportation.
5. The method of claim 1, wherein in the step (8), the material stock file includes a return product ID, a product category code and useful assembly data of the return product, and is stored in a stock database; if the production line executes production for a product category listed in a production plan, it reads a material stock file from the stock database corresponding to a product category code or assembly data of the product category, and re-assembles the semi-fabricated products in production with the useful assemblies of the return product to be fabricated products, which are packed for exportation.

6. The method of claim 1, wherein in the step (9), the testing product lacking assembly file includes a return product ID, a product category code and unuseful assembly data of the return product; if the production line executes production for a product category listed in a production plan, it reads a testing product lacking assembly file from the stock database corresponding to a product category code of the product category, and replaces the unuseful assemblies of the return product with useful assemblies for making the return product be an exporting product, which is packed for exportation.
7. The method of claim 1, wherein the return product IDs of the return product lacking assembly file, the product stock file, the material stock file and the testing product lacking assembly file are dedicated numbers.
8. The method of claim 1, wherein the network communication system is internet or intranet.
9. A system for processing a return product, for allowing a manufacturer to inquire return product data through a browser of a terminal device and a network communication system, so as to effectively utilize return products and reduce stock, wherein a return product processing station pre-constructs a RMA (return material authorization) file for a return product from a client, and the RMA file includes a product category code, assembly data and a client code of the return product; the system comprising:

a processing module for receiving a request from the manufacturer and executing corresponding procedure according to the request;

a material database for storing a BOM (bill of material) file of each product category, wherein the BOM file includes a product category code and assembly data, and the product category code is used as an identification number of the BOM file;

an examining module for searching in the material database for a BOM file corresponding in product category code to a RMA (return material authorization) file

when the processing module receives the RMA file transmitted from the return product processing station, and for comparing the RMA file in assembly data with the BOM file, wherein the examining module constructs a return product lacking assembly file according to lacking assembly data if the RMA file lacks any assembly data listed in the BOM file, and the return product lacking assembly file has a dedicated ID;

a lacking assembly database for storing the return product lacking assembly file constructed by the examining module;

a printing module for retrieving a return product lacking assembly file from the lacking assembly database corresponding to a client code or an ID of the return product when the processing module receives a request for printing the lacking assembly data from the manufacturer, so as to form a report for the return product lacking assembly file and print out the report for charging the client for the lacking assemblies; and

a stock database for storing product stock files, material stock file and testing product lacking assembly files, which are constructed by the processing module after the examining module compares product assemblies; wherein the processing module constructs a product stock file corresponding to a return product that is intact in assembly and tested to function properly by the return product processing station; if a production line executes production for a product category listed in a production plan, it reads a product stock file from the stock database corresponding to a product category code of the product category, and packs the return product for exportation; if the return product processing station disassembles the return product not functioning properly for obtaining useful assemblies, the processing module constructs a material stock file according to the useful assemblies; if the production line executes production for a product category listed in the production plan, it reads a material stock file from the stock database corresponding to a product category code or assembly data of the product category, and re-assembles semi-fabricated products with the useful assemblies to be

fabricated products, which are packed for exportation; if the return product processing station does not disassemble the return product not functioning properly, the processing module constructs a testing product lacking assembly file according to useless assemblies of the return product not functioning properly; if the production line executes production for a product category listed in the production plan, it reads a testing product lacking assembly file from the stock database corresponding to a product category code of the product category, and replaces the useless assemblies of the return product with useful assemblies for making the return product be an exporting product, which is packed for exportation.

10. The system of claim 9, wherein the return product lacking assembly file includes a return product ID, a client code, a product category code and lacking assembly data of the return product.
11. The system of claim 9, wherein the product stock file includes a return product ID, a client code, a product category code and assembly data of the return product.
12. The system of claim 9, wherein the material stock file includes a return product ID, a product category code and useful assembly data of the return product.
13. The system of claim 9, wherein the testing product lacking assembly file includes a return product ID, a product category code and useless assembly data of the return product.
14. The system of claim 10, wherein the return product ID is a dedicated number for the return product lacking assembly file.
15. The system of claim 11, wherein the return product ID is a dedicated number for the product stock file.
16. The system of claim 12, wherein the return product ID is a dedicated number for the material stock file.
17. The system of claim 13, wherein the return product ID is a dedicated number for the

testing product lacking assembly file.

18. The system of claim 9, wherein the network communication system is internet or intranet.

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